

A Key Industrial Problem

Since 1955 the demand for steel in the Soviet Union has increasingly outstripped the available supply and the shortage of steel has intensified. The lack of sufficient steel was a primary reason for the abandonment of the Sixth Five Year Plan (1956-1960). Cause of the steel shortage is attributable to the two major problems currently facing this Soviet industry; (a) the inadequate supply of usable iron ore of the requisite quality and to a lesser degree, (b) the manufacture of rolling mill equipment. Present Soviet plans schedule a major expansion of iron ore mining and concentrating facilities with the intention of eliminating this bottleneck by 1960-1961 at which time the supply of rolling mill equipment may become the primary obstacle to the more rapid growth of the Soviet steel industry.

The supply of rolling mill equipment must be expanded rapidly if the goal of the Seven Year Plan to increase rolled steel output by 25 to 30 million net tons (34-40 million tons of crude steel) is to be met with the concurrent necessity of retiring a considerable number of obsolete mills. Moreover, Soviet industrial consumers will require rolled steel products of improved quality and greater variety requiring the manufacture of still more units. Although committed to export rolling mills to China, Bulgaria, Poland, and probably for the further expansion of the Indian steel industry, the USSR presently is a net importer of such equipment, primarily from East Germany and Czechoslovakia. According to present Soviet plans, no new plants for the manufacture of rolling

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mill equipment will be completed until near the end of the Seven Year Plan, although the two major producers will be expanded. The 1965 target for the production of rolling mill equipment appears inadequate when measured against known Soviet commitments. Productivity of mills would have to be increased over 50 percent to meet the goal. Apparently, the Soviets intend to step up mill productivity sharply. (See announcement attached) However, with the elimination in 1958 of COCOM embargo controls on all but a few specialized types of rolling mills the USSR is now free to procure such equipment in the West.

Questions on Key Industrial Problem

1. Are the Soviets successfully meeting plans for introducing new iron ore mining and concentrating capacity so that bottlenecks in ore supplies will be eliminated by 1960-1961?

2. Does the supply of adequate rolling mill equipment in the USSR during the Seven Year Plan depend on imports from the West? To what degree? If an adequate supply is dependent on imports from the West and if the imports are not forthcoming who will be left out?

3. A shortage of large diameter pipe-mill capacity is endangering fulfillment of pipe-line projects essential for the supply of gas and oil needed by Soviet industry. Are the Soviets planning to rely on imports of pipe, pipe mills, or do they expect to install adequate domestic facilities soon?

VII. METALLURGICAL MACHINERY

NOVO-KRAMATORSK PLANT TRIPLES PRODUCTION OF ROLLING EQUIPMENT -- Kiev, Pravda Ukrainy, 27 Jan 59

Between the end of 1955 and the early part of 1958, the Novo-Kramatorsk Machine Building Plant imeni Stalin developed a high-speed slab-rolling mill for the Karaganda Metallurgical Combine, single-design hoisting cranes for hydroelectric power stations, and the 1500 planetary mill, the first of its kind made in the USSR.

During the next 7 years, the plant must more than triple its annual production of rolling equipment, which constitutes its basic product, without materially expanding its production area or increasing its number of workers. Many of its new rolling mills will be 50 percent more productive than similar mills made by the plant in the past.

The 2300/17000 strip mill, made by the Novo-Kramatorsk Plant in 1958, was assembled almost entirely from units previously designed for other mills.

In 1955, the Novo-Kramatorsk Plant designed a rolling mill for the Chelyabinsk Metallurgical Plant, and made a section of this mill in 1956. However, further work on the mill was not included in the plans for the next 2 years, and its completion was delayed for 3 years.

Since 1956, the plant has been assembling the 1700 mill, and to complete the mill in 1959, it has to make only 1,500 tons of equipment. However, the (1959) plan cut this amount in half, and the delivery date, has therefore been postponed. -- I, Khudyakov, Chief Designer, Novo-Kramatorsk Machine Building Plant imeni Stalin.